

DATASHEET Version 20181206

IL-7, Human

Cat. No.: Z02704-10

Size: 10.0 ug

Synonyms: Interleukin-7 (IL-7), Human;

Description:

IL-7 is a hematopoietic growth factor which affects primarily early B and T cells. Produced by thymic stromal cells, spleen cells and keratinocytes, IL-7 can also co-stimulate the proliferation of mature T cells in combination with other factors such as ConA and IL-2.

Amino Acid Sequence:

00001 DCDIEGKDGK QYESVLMVSI DQLLDSMKEI GSNCLNNEFN 00041 FFKRHICDAN KEGMFLFRAA RKLRQFLKMN STGDFDLHLL 00081 KVSEGTTILL NCTGQVKGRK PAALGEAQPT KSLEENKSLK 00121 EQKKLNDLCF LKRLLQEIKT CWNKILMGTK EH Source: E. coli Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using murine 2E8 cells is less than 0.5 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^6$ IU/mg.

Molecular Weight: Approximately 17.4 kDa, a single non-glycosylated polypeptide chain containing 152 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rHulL-7 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.